

REMARKS

Claims 1-44 are currently pending in the application. Claim 36 has been allowed. Claims 7, 16, 25, 43-44 were objected to. Claims 1-6, 8-15, 17-24, 26-31, 32-35, 37-42 were rejected. These objections and rejections are respectfully traversed. Claim 34 has been amended.

Amended claim 34 is fully supported by the Specification. Claim 34 has been amended to recite certain features pertaining to selecting a gateway device similar to those contained in the other independent claims. The amendment is made for purposes of expediting prosecution, and is made without prejudice to the Applicants' right to assert the claim in this or related applications in the future.

The positions set forth in the Office Action have been carefully considered. The objections and rejections are respectfully traversed.

ALLOWABLE SUBJECT MATTER

Claim 36 has been allowed. The Applicants are grateful to the Examiner for this allowance.

Claims 7, 16, 25, 43-44 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants acknowledge with appreciation the indication concerning the allowability of these dependent claims if rewritten in independent form.

Applicants believe that the other pending claims (i.e., claims 1-6, 8-15, 17-24, 26-31, 32-35, 37-42) are also in condition for allowance for at least the reasons set forth below.

REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-6, 8-15, 17-24, 26-31, 32-35, 37-42 were rejected under 35 U.S.C. 102(e) as being anticipated by Wils et al. (US Pat. No. 6,397,260), hereinafter referred to as Wils. These rejections are respectfully traversed.

Various embodiments of the present application, as recited in independent claims 1, 8, 10, 17, 19, 26, 32, 34, and 37, are directed to providing gateway services to hosts. Independent claims 1, 8, 10, 17, 19, 26, 32, 34, and 37 variably recite "in response to the received ARP message [from a host], and based on load balancing considerations, selecting one of the plurality

of gateway devices to act as the addressee gateway device for the host.”

Wils does not teach this claim element. Wils describes a system in which routers on a network are assigned a subspace of a source address space from which source addresses of source nodes on the network are drawn. Wils states: “A network is operated such that message forwarding traffic is shared among routers in a load-sharing set. The *routers are respectively associated with different non-overlapping subspaces of a source address space from which source addresses of source nodes on the network are drawn*, and each router has an identifier uniquely identifying the router in the load-sharing set. Address request messages identifying a predetermined forwarding route are broadcast on the network by source nodes, each request message containing a source address of the broadcasting node. *In response to each address request message, each router determines whether the source address is within the address subspace associated with the router, and if so returns the router's identifier to the source node.*” (Wils, Abstract (emphasis added).)

Based on this description from Wils, receiving an address request message at a gateway device does not trigger a load balancing determination. Rather, to the extent that Wils’ system takes into account load balancing considerations, these considerations are only made at the time the source address space is divided up among the different routers on the network.

By contrast, various embodiments of the present invention recite a system in which load balancing considerations are taken into account in a dynamic manner each time a host sends an ARP message to a gateway device. Claims 1, 8, 10, 17, 19, 26, 32, 34, and 37 recite selecting one of the plurality of gateway devices to act as the addressee gateway device for a host, based on load balancing considerations, “in response to” receiving an ARP message from the host.

The Examiner asserts that Wils teaches this claim element, citing col. 5, line 57 to col. 6, line 20 of Wils. (Office Action, pages 2-3.) The section cited by the Examiner states in pertinent part: “Thus in the configuration shown in FIG. 2, router R1 responds to ARP requests for IP address IPA by returning the MAC address MA, and forwards all packets containing the MAC address MA to the appropriate next hop node in SUBNET 2. Router R2 performs the same functions for IP address IPB and MAC address MB.” (Wils, col. 5, ln. 57 to col.6, ln. 4.) As best understood, if the node sending the address request message has an address in IPA, R1 responds with a message indicating its routing identifier. But if the node sending the address request message has an address in IPB, R2 responds with a message indicating its router identifier. Neither router appears to undertake any load balancing considerations.

Furthermore, rather than performing a load balancing determination when an ARP message is received, in Wils, each router appears to be assigned a “non-overlapping” address subspace from the outset. Accordingly, all that happens when an address request message is

received from a node is that each router determines “whether the source address [of the node] is within the address subspace associated with the router.” (Wils, Abstract.) There is no dynamic consideration of load balancing considerations. Accordingly, the process described in Wils does not teach or suggest “in response to the received ARP message [from a host], and based on load balancing considerations, selecting one of the plurality of gateway devices to act as the addressee gateway device for the host.”

For at least the above reasons, the Applicants respectfully submit that Wils does not teach the elements of the independent claims. In view of the foregoing, the Applicants respectfully request withdrawal of the rejections and objections against independent claims 1, 8, 10, 17, 19, 26, 32, 34, and 37, and their dependent claims.

INFORMATION DISCLOSURE STATEMENTS

The Applicants respectfully wish to bring to the Examiner’s attention three Information Disclosure Statements (IDSs) submitted by the Applicants in connection with this application that have not yet been acknowledged by the Examiner. The three IDSs at issue were submitted prior to the issuance of the first office action in this case. The Applicants submitted a total of six IDSs prior to the first office action. The Examiner considered three of them, but did not address the other three. The Applicants respectfully request that the Examiner consider these IDSs, dated, respectively, November 25, 2002, March 18, 2004, and April 30, 2004. For the Examiner’s convenience, the Applicants have attached copies of these three IDSs, as downloaded from the image file wrapper for this case on PAIR, to the instant Amendment.

CONCLUSION

The Applicants believe that all pending claims are allowable. Should the Examiner believe that a telephone conference would expedite prosecution of this application, the Examiner is encouraged to contact the Applicant’s representative at the telephone number set forth below.

Respectfully submitted,
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